

REMARKS

This application claims the benefit of U.S. Provisional Application No. 60/217,123, filed July 10, 2000.

In this final Office Action dated February 7, 2006, the Examiner has entered the Applicants' previous amendments to Claims 1 and 9 as requested in the Applicants' previous response filed on November 7, 2005. Claims 1 and 3-17 remain pending. The Examiner has maintained the previous rejection of Claims 1 and 3-17 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5, 732,270 to Foody et al., ("Foody") in view of Katchabaw et al., "Making Distributed Applications Manageable Through Instrumentation," *The Journal of Systems and Software*, Vol . 45, No. 2, March 1999 ("Katchabaw") for the same reasons as set forth in the previous Office Action. In addition, the Examiner has cited new passages in Foody disclosing, among other information, a "universal object," and argues that the disclosure in those passages reads on the common language runtime engine recited in amended independent Claims 1 and 9.

The Applicant thanks the Examiner for granting an interview to clarify the Examiner's outstanding rejections citing Foody and Katchabaw, as well as to review the Applicants' proposed amendments to the claims prior to submitting this response. At the conclusion of the interview, the Applicants and the Examiner did not reach an agreement with regard to allowable subject matter. In particular, the Examiner maintained the rejection based on his conclusion that the "universal object" disclosed in Foody discloses the managed code and common language runtime environment recited in independent Claims 1 and 9. However, the Examiner suggested that adding or substituting limitations to clarify the terms "managed code" and "instrumentation data" would likely aid in distinguishing the claims over the cited art. The Examiner further suggested that limitations drawn to the subject matter disclosed in the written description accompanying Figures 5-9 would also aid in distinguishing the claims over the cited art.

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In this response, the Applicants request continued examination of the application, and have again amended independent Claims 1 and 9, as well as dependent Claims 3, 4, 10-13, and 15 to more particularly point out the subject matter which Applicants claim as their invention. Claims 1 and 3-17 remain pending. The amendments to the claims are supported by the Specification and do not introduce any new matter.

The Applicants respectfully traverse the rejection of Claims 1 and 3-17 under 35 U.S.C. § 103(a). Specifically, the Applicants submit that Foody, Katchabaw, and knowledge in the art at the time of making the invention, either alone or in combination, fail to teach or suggest accessing instrumentation data from within a managed code runtime environment, including **providing an application written in a runtime-aware programming language, executing the application in a runtime environment having a runtime engine, wherein there is a defined contract of operation between the executing application and the runtime engine to delegate certain application tasks to the runtime engine that enable the runtime engine to service requests from the executing application at runtime, including requests for instrumentation data representing management information about other applications and devices available outside the runtime environment, receiving a request at the runtime engine from the executing application for instrumentation data available outside said runtime environment, the request including a path of an instrumentation data object for accessing the instrumentation data, options used to retrieve the instrumentation data object, and an identification of a parent of the instrumentation data object, and converting the response to a format that is compatible with the runtime environment, including converting the instrumentation data object to a management object that is compatible with the runtime environment and that encapsulates properties of the instrumentation data object for easy access by the application at runtime, as recited in the amended claims.** Pursuant to 37 C.F.R.

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§ 1.111, and for the reasons set forth below, the Applicants respectfully request the examiner to reconsider and withdraw the rejections, and to allow this application as soon as possible.

Rejection of Claims 1 and 3-17 under 35 U.S.C. § 103(a) over Foody in view of Katchabaw

Claim 1 as currently amended reads as follows:

1. A computer-implemented method for providing access to instrumentation data from within a managed code runtime environment, the method comprising:

providing an application written in a runtime-aware programming language;

executing the application in a runtime environment having a runtime engine, wherein there is a defined contract of operation between the executing application and the runtime engine to delegate certain application tasks to the runtime engine that enable the runtime engine to service requests from the executing application at runtime, including requests for instrumentation data representing management information about other applications and devices available outside the runtime environment;

receiving a request at the runtime engine from the executing application for instrumentation data available outside said runtime environment, the request including a path of an instrumentation data object for accessing the instrumentation data, options used to retrieve the instrumentation data object, and an identification of a parent of the instrumentation data object;

transmitting the request for said instrumentation data to an instrumentation data source external to said runtime environment;

receiving a response to said request from said instrumentation data source;

converting said response to a format that is compatible with said runtime environment;

and

responding to said request for instrumentation data with said converted response.

In support of the rejection of Claim 1, the Examiner has cited passages appearing in Col. 7, lines 39-58, and Figs. 6-7, and 12C of Foody, and concludes that the "universal object" disclosed in the cited passages discloses a common language runtime because the "universal object" purportedly enables "heterogeneous constructs language [sic] to cooperate" (Office Action, P. 2, para 3). The Applicants disagree.

The cited disclosure in Foody merely describes a more conventional development and execution environment where some operating system facilities are accessed via dynamically linked library ("DLL") functions, some via Component object model ("COM") objects, or Common Object Request Broker Architecture ("CORBA") objects, among others. Nowhere in Foody is there disclosed an application development and execution environment that provides an application written in a runtime-aware programming language, executing the application in a runtime environment in which there is a defined contract of operation between the executing application and the runtime engine to delegate certain application tasks to the runtime engine that enable the runtime engine to service requests from the executing application at runtime, including requests for instrumentation data representing management information about other applications and devices available outside the runtime environment. As noted by Applicants on Pages 3 and 12 of the Specification, managed code applications are different from more conventional native code applications in that they are encoded in a common language and are executed in a common language runtime environment. As noted on Page 12 of the Specification, the common language is a runtime-aware language that allows certain tasks to be delegated to a runtime engine provided in the common language runtime environment. For this reason, among others, accessing data external to the common language runtime environment presents difficulties not addressed by the disclosure in Foody. Whether the universal object disclosed in Foody enables *heterogeneous* language constructs to cooperate does not disclose the runtime

environment recited in independent Claims 1 and 9. If anything, the disclosure of universal objects that enable *heterogeneous* language constructs to cooperate teaches away from the claimed embodiment recited in Claim 1, in which there is a defined contract of operation between the executing application and the runtime engine to delegate certain application tasks to the runtime engine that enable the runtime engine to service requests from the executing application at runtime, including requests for instrumentation data representing management information about other applications and devices available outside the runtime environment.

The Examiner has also rejected Claim 1 for the same reasons as presented in the previous Office Action. In this response, the Applicants resubmit the arguments for the allowability of Claim 1 as presented in the previous response. In addition, the Applicants submit that the clarifying amendments to Claim 1 provided in this response further distinguish Claim 1 over Foody and Katchabaw, taken alone or in combination. In particular, Applicants submit that neither Foody nor Katchabaw disclose an **instrumentation data object for accessing instrumentation data representing management information about other applications and devices available outside the runtime environment**, much less receiving a request from an **application written in a runtime-aware language for instrumentation data available outside of a runtime environment, the request including a path of an instrumentation data object for accessing the instrumentation data, the options used to retrieve it, and the identification of the object's parent.**

Applicants further submit that Claims 3-8 as currently amended are allowable at least in part because they depend from allowable independent Claim 1, and because of their additional limitations. Accordingly, the Applicants respectfully request reconsideration and allowance of dependent Claims 1 and 3-8.

Claim 9 as currently amended reads as follows:

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9. A computer-implemented method for accessing instrumentation data from within a runtime environment, wherein the runtime environment provides a runtime engine that compiles an application encoded in a runtime-aware language into executable code, the method comprising:

receiving a request from the application for instrumentation data representing management information about other applications and devices available outside the runtime environment, the request comprising a path of an instrumentation data object for accessing said instrumentation data, options used to retrieve the instrumentation data object, and a namespace of the instrumentation data object;

in response to said request, querying for said instrumentation data using the path of said instrumentation data object for accessing said instrumentation data;

determining whether said instrumentation data was successfully returned; and

in response to determining that said instrumentation data was successfully returned, constructing a management object in the runtime environment and populating said management object with said instrumentation data.

In support of the rejection of Claim 9, the Examiner has cited the same passages cited with respect to Claim 1, reaching the same conclusion that the "universal object" disclosed in the cited passages discloses a common language runtime because the "universal object" purportedly enables "heterogeneous constructs language [sic] to cooperate" (Office Action, P. 2, para 3). The Applicants disagree for the same reasons set forth with respect to Claim 1.

In addition, the Applicants submit that the clarifying amendments to Claim 9 provided in this response further distinguish Claim 9 over Foody and Katchabaw, taken alone or in combination. In particular, Applicants submit that neither Foody nor Katchabaw disclose an **instrumentation data object for accessing instrumentation data representing management**

information about other applications and devices available outside the runtime environment, much less receiving a request from an application encoded in a runtime-aware language for instrumentation data available outside a runtime environment that includes the path of an instrumentation data object for accessing the instrumentation data, the options used to retrieve it, and the identification of the object's parent.

Applicants further submit that Claims 10-17 as currently amended are allowable at least in part because they depend from allowable independent Claim 9, and because of their additional limitations. Accordingly, the Applicants respectfully request reconsideration and allowance of dependent Claims 9 and 10-17.

CONCLUSION

In view of the foregoing remarks, Applicant submits that all of the claims in the present application are clearly patentably distinguishable over the teachings of Foody and Katchabaw, taken alone or in combination with other teachings in the prior art. Independent Claims 1 and 9 are clearly and patentably distinguishable over the cited and applied references. Claims 3-8 and 10-17 are allowable because they depend from allowable independent Claims 1 and 9, and because of their additional limitations, some of which have been discussed above. Accordingly, Applicants submit that this application is in condition for allowance. Reconsideration and reexamination of the application, allowance of the claims, and passing of the application to issue at an early date are solicited. If the Examiner has any remaining questions concerning this

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application, the Examiner is invited to contact the Applicant's undersigned attorney at the number below.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

Date:

June 5, 2006

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